JOURNAL OF ELECTROANALYTICAL CHEMISTRY

Vol. 356 Nos. 1 and 2 15 SEPTEMBER 1993

CONTENTS

Nonlinear regression analysis of reversible ion transfer in current-scanning voltammetry
W. Wanzhi, L. Song, N. Lihua and Y. Shouzhuo (Changsha, People's Republic of China) ... 1

Determination of the diffusion coefficients of ligands in metal complex systems
B. Van der Linden and J. Vereecken (Brussels, Belgium) ... 13

An explicit finite difference simulation for chronoamperometry at a disk microelectrode in a channel flow solution
R.J. Tait, P.C. Bury, B.C. Finnin, B.L. Reed and A.M. Bond (Victoria, Australia) ... 25

Determination of copper at surface-modified electrodes: effects of competitive binding and electrode size
E. Lorenzo (Madrid, Spain), J. Fernández (Toledo, Spain), F. Pariente (Madrid, Spain), K. Trible, B. Pendley (Memphis, TN, USA) and H. Abruña (Ithaca, NY, USA) ... 43

Effect of thiourea on the activity of the polypyrrole uricase electrode and determination of thiourea
M. Shaolin (Yangzhou, People's Republic of China) and C. Shufan (Shanghai, People's Republic of China) ... 59

Effect of the sample ionic strength on the preconcentration attained in ion exchange voltammetry
R. Toniolo, G. Bontempelli (Udine, Italy), G. Schiavon and G. Zotti (Padova, Italy) ... 67

Electron spectroscopy characterization of an activated ruthenium electrode
M. Vuković, T. Valla and M. Milun (Zagreb, Croatia) ... 81

Electroreduction of buckminsterfullerene (C_{60}) in aprotic solvents. Part 2. Role of solvation
V. Krishnan, G. Moninot, D. Dubois, W. Kutner and K.M. Kadish (Houston, TX, USA) ... 93

A study of cathodic oxygen reduction at platinum using microelectrodes
D. Pletcher and S. Sotiropoulos (Southampton, UK) ... 109

Surface states and Fermi level pinning at semiconductor/electrolyte junctions
H.J. Lewerenz (Berlin, Germany) ... 121

In situ resonance Raman and reflectance spectroscopic study of the electrochemical oxidation of diphenylamine
H. De Santana, M.L.A. Temperini and J.C. Rubim (São Paulo, Brazil) ... 145

The electrochemical oxidation of carbon monoxide on a platinum/solid protonic conductor interface
R. Palombari and B. Sebastiani (Perugia, Italy) ... 157

Preparation of hydrophobic zinc and lead electrodes and their application to electroreduction of organic compounds electro-organic reactions on organic electrodes. Part 20: electrolysis using composite-plated electrodes. Part IX
Y. Kunugi, T. Nonaka (Yokohama, Japan), Y.-B. Chong and N. Watanabe (Kyoto, Japan) ... 163

Investigations of adsorption potentiometry. Part 7. Theory of second- and third-order differential adsorption chronopotentiometry for a reversible reaction
H. Zhang and W. Jin (Jinan, China) ... 171

Evidence for adsorption of $Fe(CN)_6^{3-/4-}$ on gold using the indirect laser-induced temperature-jump method
J.F. Smalley, L. Geng, S.W. Feldberg, L.C. Rogers (Upton, NY, USA) and J. Leddy (Iowa City, IA, USA) ... 181

Adsorption of sodium dodecylsulphate on mercury as an example of micellization within a multilayer interphase
S. Sotiropoulos, P. Nikitas and N. Papadopoulos (Thessaloniki, Greece) 201

Interfacial micellization of cetyl-dimethyl-benzylammonium chloride and Tween-80^{R} at the Hg/electrolyte solution interphase
S. Sotiropoulos, P. Nikitas and N. Papadopoulos (Thessaloniki, Greece) 225

Electrochemical characterization of polypyrrole bienzyme electrodes with glucose oxidase and peroxidase
T. Tatsuma, T. Watanabe and T. Watanabe (Tokyo, Japan) 245

Electrosorption of sorbitol at platinum electrodes: effect of the superficial structure
J.-M. Léger, F. Hahn, B. Beden, C. Lamy (Poitiers, France), M.F. Bento, I. Fonseca and M.I.S. Lopes (Lisboa, Portugal) 255

Short communication

Electro-oxidative polymerization of *m*-chlorophenol and *m*-bromophenol
S. Taj, M.F. Ahmed and S. Sankarapapavinasam (Bangalore, India) 269

Preliminary notes

Coadsorption of copper and halogens on Pt(111) and Au(111) electrode surfaces studied by scanning tunneling microscopy
H. Matsumoto, I. Oda, J. Inukai and M. Ito (Yokohama, Japan) 275

Real-time and absolute compositional analyses of electrodeposited thin films via combined coulometry and electrochemical quartz crystal microgravimetry: application to the Cd + Se system
N. Myung, C. Wei and K. Rajeshwar (Arlington, TX, USA) 281

The influence of prior electrode history on mobile species transfer characteristics of polymer modified electrodes
A.P. Clarke, J.G. Vos (Dublin, Ireland) and A.R. Hillman (Leicester, UK) 287

Mediated electrocatalysis at a biocatalyst electrode based on a bacterium, *Gluconobacter industrius*
K. Takayama (Fukui, Japan), T. Kurosaki and T. Ikeda (Kyoto, Japan) 295

The first evidence for the electrochemically generated germyl anion
M. Okano (Kanagawa, Japan), T. Kugita (Yamanashi, Japan) and K. Mochida (Tokyo, Japan) 303

Far-infrared synchrotron radiation for in situ studies of the electrochemical interface
A.E. Russell (Liverpool, UK), G.P. Williams (Upton, NY, USA), A.S. Lin and W.E. O'Grady (Washington, D.C., USA) 309

Corrigendum 317

Errata 319

Book reviews 323

Announcements 327

Author index 331

Subject index 333